

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/599,893	DUTTA, RABINDRANATH
	Examiner	Art Unit
	Steven P Sax	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to Examiner's Amendment 6/7/05.
2.  The allowed claim(s) is/are 1-31.
3.  The drawings filed on 23 June 2000 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 5/31/05
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 6/7/05.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

*Steven P. Sax*  
**STEVEN SAX**  
**EXAMINER**

**DETAILED ACTION**

1. This application has been examined.

2. An examiner's amendment to the record appears below. This was made to bring out in the independent claims that "all" of the plurality of icons are able to be displayed in "the designated portion" of the display screen, to distinguish over merely displaying some of the icons, as well as to overcome the designated (formerly termed) area simply being the display screen. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Please amend the following claims:

1. (currently amended) A method of displaying icons within a data processing system having a display screen, comprising the steps of:

first determining a quantity of a plurality of icons to be displayed on a display screen of a data processing system;

second determining a designated area portion of said display screen for displaying said plurality of icons; and

automatically scaling each of said plurality of icons in response to said quantity of said plurality of icons and said designated area portion such that all of said plurality of icons can be displayed in said designated area portion of said display screen.

4. (currently amended) The method of Claim 1, further comprising the step of displaying all of said plurality of icons on said designated portion of said display screen.

5. (currently amended) The method of Claim 1, further comprising the step of displaying all of said plurality of icons on said designated portion of said display screen, wherein said plurality of icons comprise a graphic image and a text image.

6. (currently amended) The method of Claim 1, further comprising the step of displaying all of said plurality icons on said designated portion of said display screen, wherein said plurality of icons only comprise a text image.

7. (currently amended) The method of Claim 4, wherein said step of displaying all of said plurality of icons on said designated portion of said display screen, comprises displaying all of said plurality of icons on said designated portion of said a display screen, wherein said designated portion of said display screen has a fixed pixel width and a fixed pixel height.

8. (currently amended) A icon scaling system for use with a data processing system having a display, said icon scaling system comprising:

    a calculation routine that determines a quantity of a plurality of icons to be displayed on a display screen of a data processing system;

    a boundary routine that determines a designated area portion of said display screen for displaying said plurality of icons; and

    a scaling routine that automatically scales said plurality of icons in response to quantity of a plurality of icons and said designated area portion such that all of said plurality of icons can be displayed in said designated area portion of said display screen.

14. (currently amended) The system of Claim 8, wherein said designated portion of said display screen has a fixed pixel width and a fixed pixel height.
15. (currently amended) An article of manufacture for use in a data processing system for scaling icons on a display screen, the article of manufacture comprising computer readable storage media including program logic embedded therein that causes control circuitry to perform the steps of:
  - first determining a quantity of a plurality of icons to be displayed on a display screen of a data processing system;
  - second determining a designated area portion of said display screen for displaying said plurality of icons; and
  - automatically scaling said plurality of icons in response to said quantity of said plurality of icons and said designated area portion such that all of said quantity of said plurality of icons can be displayed in said designated area portion of said display screen.
18. (currently amended) The article of manufacture of Claim 15, further comprising the step of displaying all of said plurality of icons on said designated portion of said display screen.
19. (currently amended) The article of manufacture of Claim 15, further comprising the step of displaying all of said plurality of icons on said designated portion of said display screen, wherein said plurality of icons comprise a graphic image and text image.
20. (currently amended) The article of manufacture of Claim 15, further comprising the step of displaying all of said plurality of icons on said designated

portion of said display screen, wherein said plurality of icons only comprise a text image.

21. (currently amended) The article of manufacture of Claim 18, wherein said step of displaying all of said plurality of icons on said designated portion of said display screen, comprises displaying all of said plurality of icons on a display screen, wherein said display screen has a fixed pixel width and a fixed pixel height.

22. (currently amended) A method, for displaying icons within a data processing system having a display screen, comprising the steps of:

    determining a size of a designated area portion of a display screen for displaying a plurality of icons;

    displaying all of said plurality of icons within said determined size of said designated area portion by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of said plurality of icons displayed within said determined size of said designated area portion.

23. (currently amended) A method, for displaying icons within a data processing system having a display screen, comprising the steps of:

    determining a size of a designated area portion of a display screen for displaying a plurality of icons;

    utilizing a predetermined minimum size and a predetermined maximum size for an individual icon;

    displaying all of said plurality of icons within said determined size of said designated area portion, based upon said predetermined minimum size and said predetermined maximum size, by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of the plurality of icons displayed within said determined size of said designated area portion.

25. (currently amended) A data processing system having a display screen, comprising:

    means for determining a size of a designated area portion of a display screen for displaying a plurality of icons;

    means for displaying all of said plurality of icons within said determined size of said designated area portion by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of said plurality of icons displayed within said determined size of said designated area portion.

26. (currently amended) A data processing system for displaying icons on a display screen, comprising:

means for determining a size of a designated area portion of a display screen for displaying a plurality of icons;

means for utilizing a predetermined minimum size and a predetermined maximum size for an individual icon;

means for displaying all of said plurality of icons within said determined size of said designated area portion, based upon said predetermined minimum size and said predetermined maximum size, by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of the plurality of icons displayed within said determined size of said designated area.

29. (currently amended) An article of manufacture for use in a data processing system for scaling icons on a display screen, the article of manufacture comprising computer readable storage media including program logic embedded therein that causes control circuitry to perform the steps of:

determining a size of a designated area portion of a display screen for displaying a plurality of icons;

displaying said all of said plurality of icons within said determined size of said designated area by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of said plurality of icons displayed within said determined size of said designated area portion.

30. (currently amended) An article of manufacture for use in a data processing system for scaling icons on a display screen, the article of manufacture comprising computer readable storage media including program logic embedded therein that causes control circuitry to perform the steps of:

determining a size of a designated area portion of a display screen for displaying a plurality of icons;

utilizing a predetermined minimum size and a predetermined maximum size for an individual icon;

displaying all of said plurality of icons within said determined size of said designated area portion, based upon said predetermined minimum size and said predetermined maximum size, by at least one of a) automatically scaling said icons; b) displaying a portion of each one of said plurality of icons; and c) creating a plurality of selectable displayed screen pages wherein each screen page has a portion of the plurality of icons displayed within said determined size of said designated area portion.

3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Andrew Dillon on 6/7/05.

4. The following is an examiner's statement of reasons for allowance: The Examiner's Amendment places the application into condition for allowance by requiring in all the independent claims that *all* of the plurality of icons are able to be displayed the designated *portion* of the screen based on both the quantity of icons and the designated portion. The term 'portion' of the display screen, as brought out in the specification, as defined in a standard dictionary, and as

confirmed in the interview 6/7/05, means a part or subset of the display screen, and thus must be smaller than the display screen itself. The present invention thus provides a technique whereby a user designates any subset or portion of the screen in which to display a quantity of a plurality of icons, and the system automatically scales each of the icons in response to both the determined quantity and designated portion so that all of the icons are able to be displayed in that designated portion. The prior art does not have this feature. Windowing systems of the prior art allow a designated container to be determined in which to place a given quantity of icons, but even with this some icons will be totally cut off, and not displayed at all – either the container portion would have to be scrolled, or the portion would have to be expanded to some degree, in some cases to the full screen size, in order to display all the icons. Even Qureshi et al scale just one object as a designated containing portion is scaled, but would not guarantee a given quantity of icons are scaled so that all can be displayed in the designated portion, and moreso such that the scaling is in response to both the designated portion and the quantity of icons – at best Qureshi et al scale an object but not in response to the number of icons and not necessarily for all icons at the same time such that all are able to be displayed in the portion.

Independent claims 1, 8, and 15, all amended, show the method, system, and article of manufacture respectively for the above described invention.

A further embodiment of the present invention determines the size of the designated portion, and displays all of the icons by either automatically scaling the icons, displaying a portion of each of the plurality of icons, or creating a

plurality of selectable screen pages each of the same size as the designated portion and each having a portion of the plurality of icons such that by selecting pages (not scrolling) will allow all the icons to be displayed. Once again, neither Qureshi et al nor other prior art show scaling all the icons to fit a given designated portion of the display screen such that all the icons are displayed, and the prior art also do not show the selectable icon screen pages each within the size of the designated area. Regarding 'displaying a portion of each one of the plurality of icons' even this is not shown in the prior art to display all of the icons in a designated portion of the display screen. At best some windowing systems may convert the icons to file name labels, but even these may be cut off if the designated portion becomes too small – the present invention however will do any of scaling, displaying a portion, or creating the screen pages such that the end result will be all of the icons being displayed in the designated portion.

Independent claims 22, 25, and 29 all amended show the method, system, and article of manufacture respectively for this embodiment. Independent claims 23, 26, and 30 all amended show the method, system, and article of manufacture like claims 22, 25, and 29 respectively, and further add that a predetermined minimum and maximum size are predetermined for a given icon – this may thus have an effect on which of the scaling, icon portion presenting, and screen page creating options are utilized in displaying all of the icons in the designated portion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven P. Sax whose telephone number is (571) 272-4072. The examiner can normally be reached on Monday thru Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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USPTO - 2174